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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,497	07/02/2003	Tientch Chen	200309844-1	9905
22879 7590 05/02/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
SHEWAREGED, BETTELHEIM				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
05/02/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/613,497

**Applicant(s)**

CHEN, TIENTEH

**Examiner**

BETELHEM SHEWAREGED

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date 3/3/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. Applicant's response filed on 02/07/2008 has been fully considered. Claims 1, 6 and 8 are amended, claims 11-20 are canceled, and claims 1-10 are pending.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sismondi et al. (US 6,387,473 B1) in view of Miller (US 2002/0142141 A1).
4. Sismondi teaches an ink jet receiving sheet comprising a support and ink receiving layers on the support (abstract). The support is described on col. 4, line 30. The ink receiving layers comprise a non-ionic surfactant (col. 3, line 31 thru col. 4, line 29), a binder (col. 5, line 63 thru col. 6, line 48), inorganic particles (col. 7, line 11 thru col. 24), an additional surfactant (col. 7, line 43 thru col. 61), a mordant (col. 7, line 62 thru col. 8, line 61), and a hardener (col. 8, line 63 thru col. 9, line 17). The additional surfactant meets the claimed nonsiloxane surfactant. The ink receiving layers further comprise glossiness improving agents, matting agents, a plasticizer, biocides and conventional additives; however, these additional components are added to improve the pictorial or physical properties of the image.
5. Sismondi does not teach the use of silicone surfactant as the non-ionic siloxane surfactant. However, Miller teaches an image receptor sheet comprising an image

receiving layer provided on a substrate, wherein the image receiving layer comprises a non-ionic silicone surfactant such as SILWET L-7605 [0049]. Since the SILWET L-7605 of Miller is substantially identical to Applicant's non-ionic silicone surfactant, current claims 2-5 and 7 are taught by the reference of Miller. Sismondi and Miller are analogous art because they are from the same field of endeavor that is the ink jet recording sheet art. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the silicone surfactant of Miller with the invention Sismondi, and the motivation would be, as Miller suggests, improving handling and sheet feeding characteristics [0049].

6. The surfactant of Miller, among other components, is mixed with at least one organic polymer, and then the mixture is coated followed by drying to form the layer (Examples). Upon drying there must be some type of bonding among the components, other wise the coated layer would fall off.

7. The relative amount of the nonionic siloxane surfactant and the nonsiloxane surfactant are not taught by the reference(s). The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the relative amount of the nonionic siloxane surfactant and the nonsiloxane surfactant, and the motivation would be to control surface tension, wetting properties and glossiness of the layer. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

### ***Response to Arguments***

8. Applicant's argument is based on that in Sismondi the non-ionic surfactant and the additional surfactant are not present in the same layer, and substituting the siloxane surfactant of Miller for the 1st non-ionic surfactant of Sismondi would not result in ink receiving layer containing both non-ionic siloxane surfactant and nonsiloxane surfactant in the same layer. This argument is not persuasive for the following reason. The additional surfactant is present in all the ink receiving layers (col. 7, lines 43-61). Thus a first ink receiving layer comprises the first nonionic surfactant and the additional, and a second ink receiving layer comprises the second nonionic surfactant and the additional surfactant. Each layer comprises both the nonionic surfactant and the additional siloxane.

9. Applicant further argued that the limitation of the nonionic siloxane surfactant contained in larger amount than that of the nonionic or anionic nonsiloxane surfactant is not taught by the reference(s). This argument is not persuasive for the following reason. One of ordinary skill in the art would have been motivated to adjust the relative amount of the nonionic siloxane surfactant and the nonsiloxane surfactant, and the motivation would be to control surface tension, wetting properties and glossiness of the layer. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results.

10. For the above reason claims 1-10 stand rejected.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BETELHEM SHEWAREGED whose telephone number is (571)272-1529. The examiner can normally be reached on Monday-Friday 9am-5pm.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BS  
April 28, 2008.

/Betelhem Shewareged/  
Primary Examiner, Art Unit 1794.